

CLAIMS

1. A wireless communication method comprising the steps of:

5 detecting a signal indicating no expected response or intent to continue in a received signal; and
 redefining frame timing to reduce the inter-frame space when the signal is detected.

10 2. The method according to claim 1, wherein said signal is included in a header of a frame.

3. The method according to claim 1, wherein said signal is included in a preamble of a frame.

15 4. The method according to claim 1, wherein said signal is included in a footer of a frame.

20 5. The method according to claim 1, wherein said signal is in the form of an additional subcarrier or combination of subcarriers in a multicarrier symbol of a frame.

25 6. A transmitter used in a station in a wireless communication system, wherein said transmitter transmits a signal indicating no expected response or intent to continue.

7. A receiver used in a station in a wireless communication system, comprising:

means for detecting a signal indicating no expected response or intent to continue in a received signal; and

5 means for redefining frame timing to reduce the inter-frame space when the signal is detected.

8. A method for reducing medium access overhead in a wireless network consisting of a plurality of stations,

10 wherein the station dynamically alters the inter-frame space by redefining interpretation of the inter-frame space, said method comprising the steps of:

detecting a signal indicating no expected response or intent to continue in a received signal; and

15 redefining the interpretation of the inter-frame space to contain shorter time slot when the signal is detected.

9. A method for reducing medium access overhead in a wireless network consisting of a plurality of stations,

20 wherein the station dynamically alters the inter-frame space by redefining interpretation of the inter-frame space, said method comprising the steps of:

detecting a signal indicating no expected response or intent to continue in a received signal; and

25 redefining the interpretation of the inter-frame spaces to contain fewer time slots when the signal is

detected.

10. The method according to claim 8 or 9, wherein the station, on detecting a signal indicating an expected response or intent to continue in a received signal,
5 interprets:

a first idle time slot subsequent to a transmission as being reserved for signaled response/continuation;

10 a second idle time slot subsequent to the transmission as being reserved to gain prioritized medium access; and

15 a third idle time slot subsequent to the transmission as being the minimum time that a station waiting to initiate a transmission on a medium must wait before commencing backoff procedure or initiating the transmission.

11. The method according to claim 8 or 9, wherein the station, on detecting a signal indicating no expected response or intent to continue in a received signal,
20 interprets:

a first idle time slot subsequent to a transmission as being reserved to gain prioritized medium access; and

25 a second idle time slot subsequent to the transmission being the minimum time that a station waiting to initiate a transmission on a medium must wait before commencing backoff procedure or initiating the

transmission.

12. A method for reducing medium access overhead in a wireless network consisting of a plurality of stations, 5 wherein the station dynamically alters inter-frame space by redefining interpretation of the inter-frame space, said method comprising the steps of:

checking a medium activity indicator determining the end of activity on the medium; and

10 redefining the interpretation of the inter-frame space to contain shorter time-slot when the medium activity indicator is checked.

13. A method for reducing medium access overhead in a wireless network consisting of a plurality of stations, 15 wherein the station dynamically alters inter-frame space by redefining interpretation of the inter-frame spaces, said method comprising the steps of:

checking a medium activity indicator determining the end of activity on the medium; and

redefining the interpretation of the inter-frame spaces to contain fewer time-slots when the medium activity indicator is checked.

25 14. A method for reducing medium access overhead in a wireless network consisting of a plurality of stations, wherein the station dynamically alters the inter-frame

space by redefining the interpretation of the inter-frame space, said method comprising the steps of:

resetting a medium activity indicator when no medium activity is indicated at the instant of time that activity
5 is expected as indicated by the medium activity indicator;
and

redefining the interpretation of the inter-frame space to contain shorter time-slot when the medium activity indicator is reset.

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15. A method for reducing medium access overhead in a wireless network consisting of a plurality of stations, wherein the station dynamically alters the inter-frame space by redefining the interpretation of the inter-frame
15 spaces, said method comprising the steps of:

resetting a medium activity indicator when no medium activity is indicated at the instant of time that activity is expected as indicated by the medium activity indicator;
and

20 redefining the interpretation of the inter-frame spaces to contain fewer time-slots when the medium activity indicator is reset.